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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,189	01/14/2005	Shigetoshi Nishijima	018765-201	2856
21839 7590 03/22/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER KRUER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1773	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 10/521,189	Applicant(s) NISHIJIMA ET AL.	
	Examiner Kevin R. Kruer	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7, and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 5, 2007 has been entered.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 7, and 13 are rejected under 25 U.S.C. 102(b) as being anticipated by JP03073588A (herein referred to as Kato).

Kato teaches a single-layered film that has been oriented mono-axially at a draw ratio of 4.3-5. The film comprises a 4-methyl-1-pentene layer homopolymer or a copolymer comprising an alpha-olefin (on-site translation) and 4-methyl-1 pentene as the major ingredient. Said film has satisfactory stretchability in production, high rigidity, and satisfactory releasability from copper foil (abstract).

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Said 4-methyl-1-pentene layer is herein understood to "not substantially comprise wax or organic silicone compound" because the reference is silent to the necessary presence of either component.

The film is herein understood to have a peel area of 50% or more when the film, together, with a copper foil surface subjected to roughening treatment is subjected to heating and pressing treatment because said laminate is taught to exhibit satisfactory releasability from copper foils.

The degree of orientation of the laminate taught in Kato is herein understood to be taught with sufficient specificity to anticipate the "4.3times or more" limitation of claim 5. Furthermore, said degree of orientation is understood to be taught with sufficient specificity to anticipate a "thermal coefficient of contraction of 20% or more along the direction in which the film is drawn" because said film is oriented to the same extent as the claimed film. It is known in the art that degree of orientation and thermal coefficient of contraction are directly related to one another. Furthermore, the courts have held that the recognition of a latent property does not patentably distinguish a claimed product from a product anticipated by the prior art.

With regard to claim 13, the film taught in Kato is understood to read on the claimed drawn film exhibiting the property that when its laminated to thermoplastic film layer (b) said films can be peeled from each other at a peel strength of 500g/15mm or

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less because said release film (A) is compositionally identical to the claimed film. Thus, said property is understood to be latent to said film.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5, 7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP59078850A (Toppan) in view of EP 1254685 (Nakahara).

Toppan teaches a polymethylpentene co-extruded between two polyolefin release sheets (abstract).

Toppan does not teach that said laminate should be uniaxially oriented. However, Nakahara teaches that uniaxially oriented methyl-1-pentene films are useful as release sheets (0007). Furthermore, Nakahara teaches that orientation of a laminate comprising polyolefin layers on either side of a polymethylpentene layer prevents unevenness and breaks (abstract). Thus, it would have been obvious to the skilled artisan to uniaxially orient the laminate taught in Toppan before removing the release sheets therefrom. The motivation for doing so would have been to obtain an oriented methyl pentene film that does not contain unevenness or breaks.

Toppan further teaches the laminate may be biaxially oriented but does not teach the degree to which it should be oriented. However, Nakahara teaches that useful

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release films are typically oriented 3-8 times (0066). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made optimize the orientation of the film taught in Toppan so that it may be utilized as a release film.

Toppan does not teach that the methyl-pentene polymer should be a copolymer. However, Nakahara teaches polymerizing 7-3wt% C2-C20 olefinic monomers with the methyl-pentene improve its moldability and mechanical strength properties (0029-0030). Thus, it would have been obvious to utilize the claimed copolymer in the laminate taught in Toppan. The motivation for doing so would have been to improve the polymethyl-pentene polymers mechanical properties and moldability.

Said 4-methyl-1-pentene layer is herein understood to "not substantially comprise wax or organic silicone compound" because the reference is silent to the necessary presence of either component.

The film is herein understood to have a peel area of 50% or more when the film, together, with a copper foil surface subjected to roughening treatment is subjected to heating and pressing treatment because said laminate is taught to exhibit satisfactory releasability from copper foils.

The degree of orientation is understood to be taught with sufficient specificity to anticipate a "thermal coefficient of contraction of 20% or more along the direction in which the film is drawn" because said film is oriented to the same extent as the claimed film. It is known in the art that degree of orientation and thermal coefficient of contraction are directly related to one another. Furthermore, the courts have held that

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the recognition of a latent property does not patentably distinguish a claimed product from a product anticipated by the prior art.

With regard to claim 13, the film taught is understood to read on the claimed drawn film exhibiting the property that when its laminated to thermoplastic film layer (b) said films can be peeled from each other at a peel strength of 500g/15mm or less because said release film (A) is compositionally identical to the claimed film. Thus, said property is understood to be latent to said film.

Response to Arguments

Applicant's arguments filed January 5, 2007 have been fully considered but they are moot in view of a new grounds of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin R. Kruer
Patent Examiner-Art Unit 1773